

US Army Corps Of Engineers

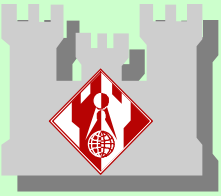
Scenario Based Strategic Planning

USACE Legal Services Workshop

New York, NY
18 May 1998

Steve
Reynolds

CERM-SS
(202) 761-1075



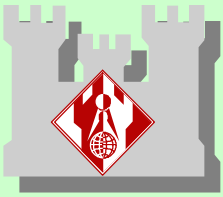
Topics

Strategic Planning Context

- ☐ What are we doing?
- ☐ Why are we doing it?

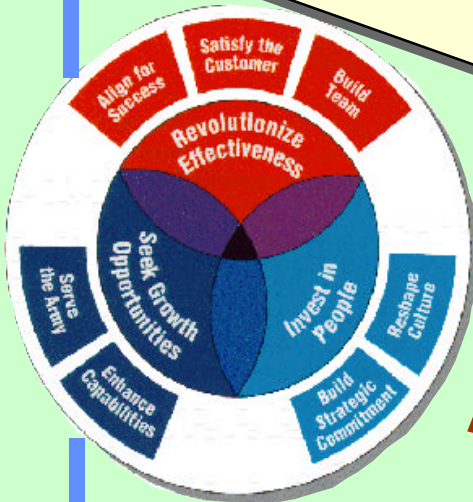
- ☐ Background
- ☐ Four Scenarios

- ☐ Segment Map
- ☐ Industry Analysis
- ☐ Next Steps



Strategic Planning Process

Initiatives Based
(Close Battle)



Corps Plus

LD
1 Oct
96

'96 SLC

Scenario Based
(Deep Battle)

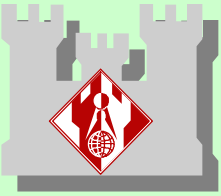
- Scenarios
- Strategic Segmentation
- Industry Analysis
- Competencies
- Key Success Factors

'97 SLC

Sustained Planning —
(Depth & Simultaneous Attack)

1999+

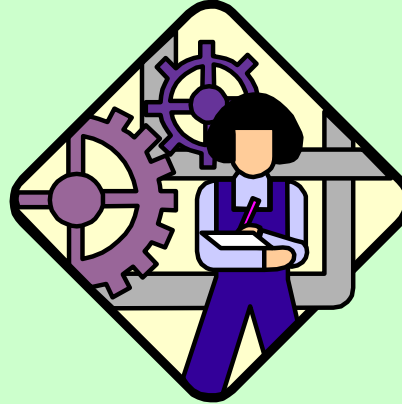
'98 SLC



Just Another Management Fad?

TQM

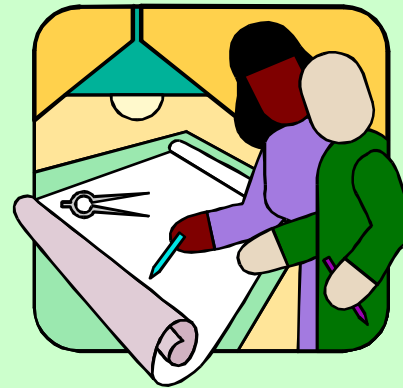
- How can we make better & better widgets?



Which question is most important to survival?

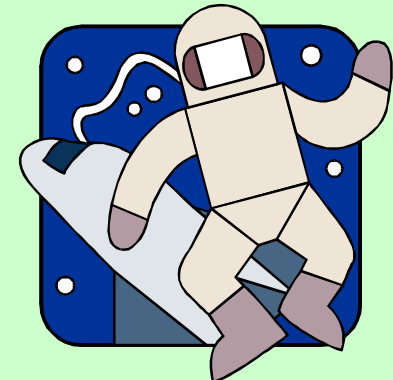
Reengineering

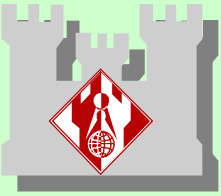
- How can we reshape the organization to get widgets to customers better, faster, cheaper?



Strategic Planning

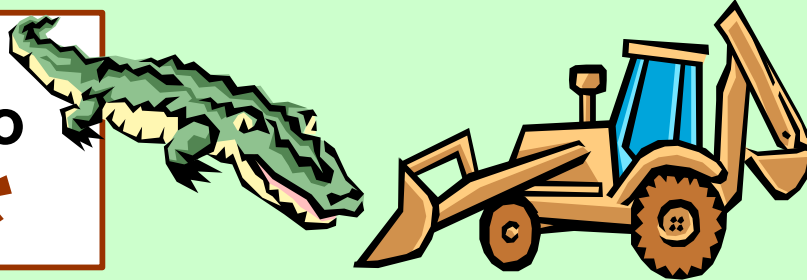
- Will anybody need widgets in a few years?





Is It Worth the Effort?

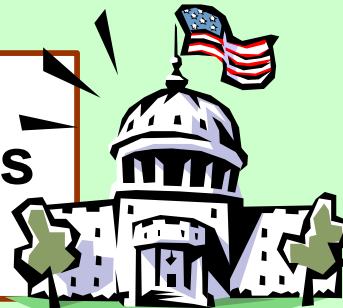
Too busy fighting today's alligators to drain the swamp *



- How much time is spent “wrestling alligators”?
- How much is “stomping cockroaches”?

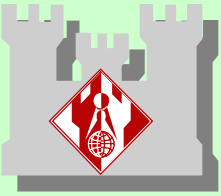


No point trying --
DA, DOD, Executive, Congress
won't let us change *



- How will we recognize when external constraints change if we don't look ahead?
- How can we help inform the debate about our future if we haven't thought about it?





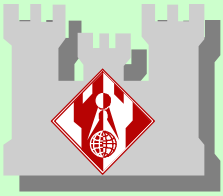
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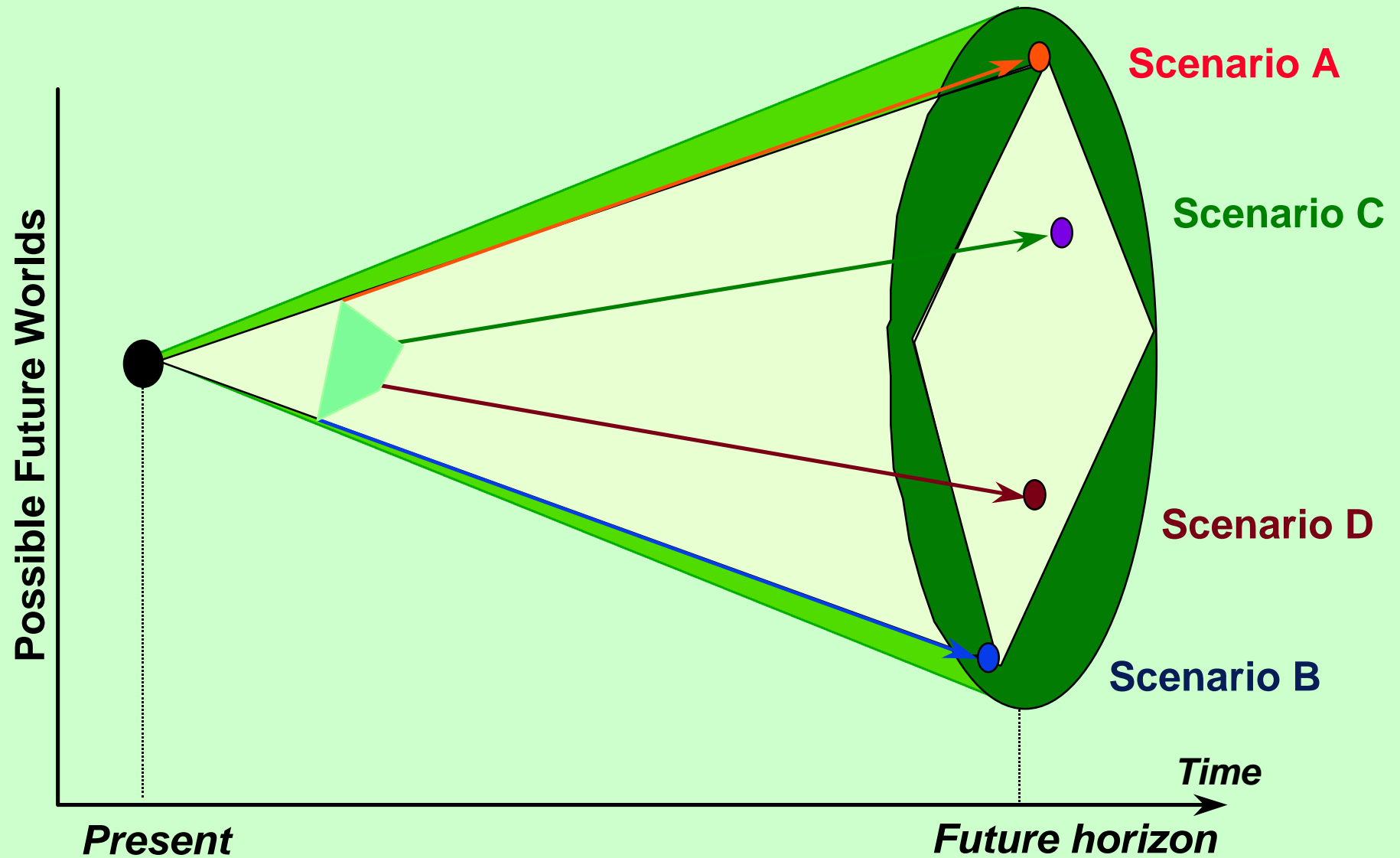
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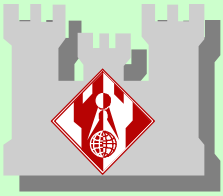
Scenario Development

- ☐ Background
 - ☐ Four Scenarios
-
- ☐ Segment Map
 - ☐ Industry Analysis
 - ☐ Next Steps

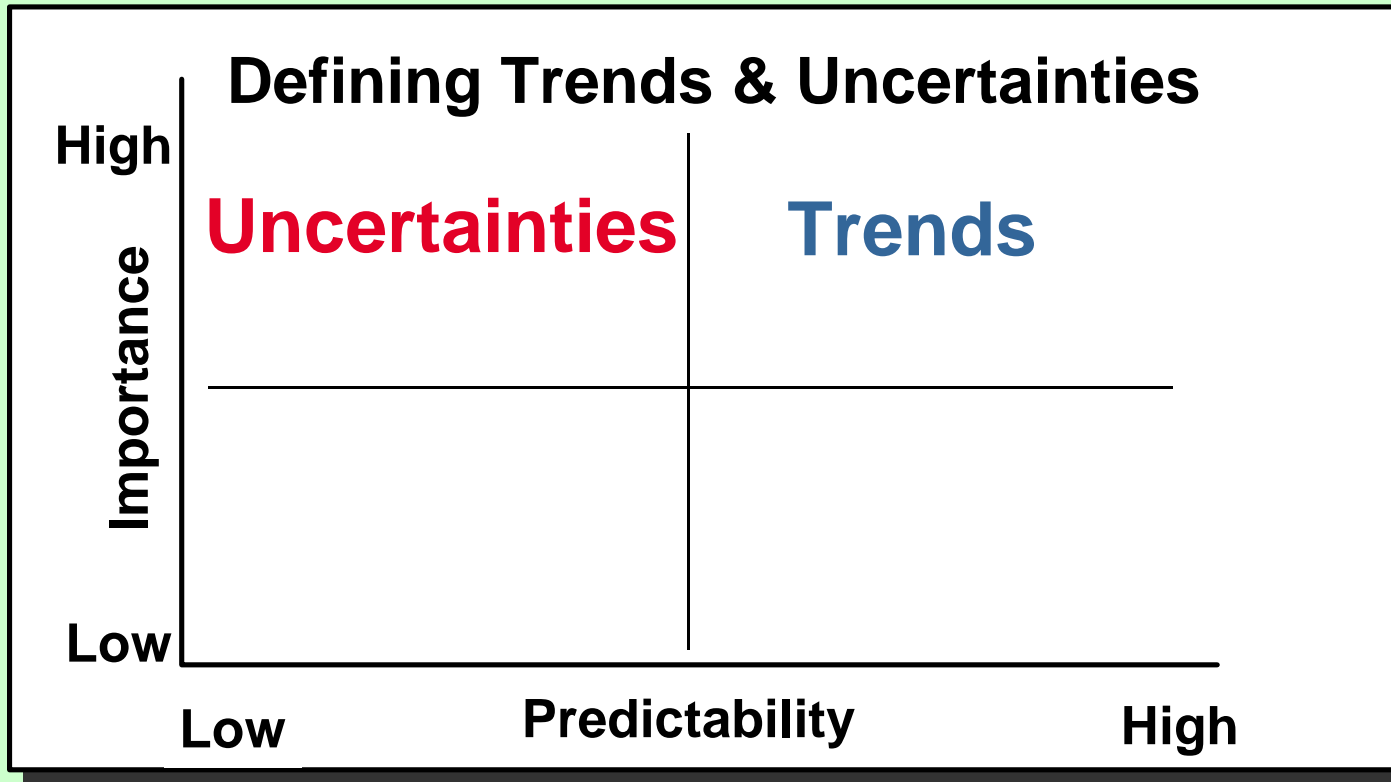


Scenario “Funnel”

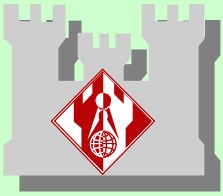




Strategic Forces Trends & Uncertainties



- ❑ Uncertainties are forces that are important yet have a highly unpredictable outcome
- ❑ Trends are forces that are highly important and highly predictable



USACE Scenario Framework

**Socio-Economic
Conditions**

**Prosperity
and
growth**

**Depression/
Instability**

**Post-Industrial
Renaissance**

**Guns and
Concrete**

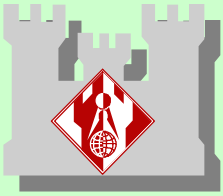
**Global
Malaise**

**Towards
Armageddon**

Peace

Conflict

Political/Cultural Climate



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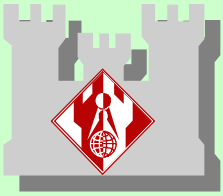
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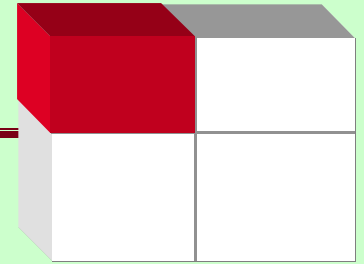
Peace

Conflict

Political/Cultural Climate



“Post-Industrial Renaissance”



World Scene

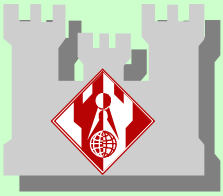
- Economic prosperity
- New technologies respond to environmental challenges
- Good quality of life
- International cooperation and peace

Domestic Scene

- Economic prosperity
- Development of national infrastructure
- New technology enhances national competitiveness
- “Virtual education”

US Government Scene

- Decentralization with less federal government
- Strong “business practices oriented” President
- Well educated and technologically sophisticated bureaucracy
- One Agency for Public Works
- “Purple suited” Joint Command for Logistics & Military Engineering



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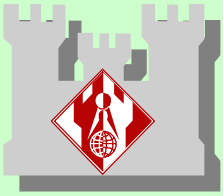
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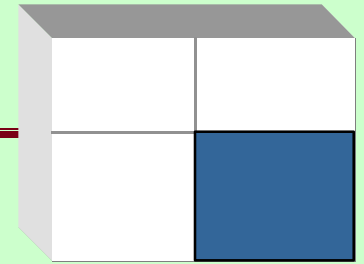
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Political/Cultural Climate



“Towards Armageddon”



World Scene

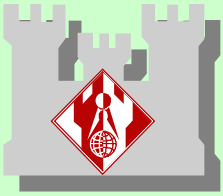
- Severe global environmental deterioration
- World economic depression
- Competition for natural resources
- Widespread ethnic conflict

Domestic Scene

- Economic instability
- Large-scale natural and man-induced disasters
- Decaying infrastructure
- Isolationist perception and reduced world stature

US Government Scene

- Consolidated, downsized, heavy debt burden
- One Agency for Public Works
- Downsized, demoralized, & isolated “purple-suited” military
- Heavy dependency on contractor support for sustainment
- Short term vision



USACE Scenario Framework

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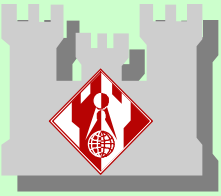
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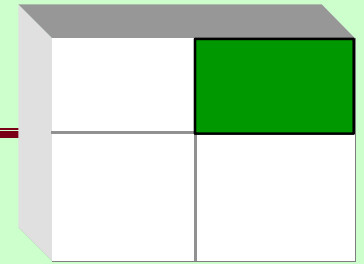
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“Guns and Concrete”



World Scene

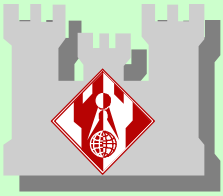
- World divided into “Haves” and “Have-Nots”
- Periodic regional conflicts
- No significant threats to major powers
- Environmental issues subordinated to economic growth

Domestic Scene

- United States more prosperous than ever
- U.S. is preeminent world power
- Public is well-educated (education designed to enhance job skills)
- U.S. involved in periodic peace-keeping operations

US Government Scene

- Swing from decentralized to centralized government
- Federal emphasis on infrastructure repair & replacement
- Public engineering coordinated by Federal Board
- Military Services retain engineer capabilities -- execution is Joint



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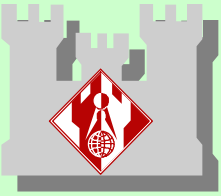
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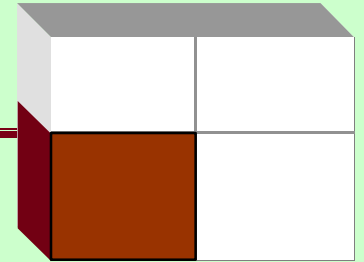
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“Global Malaise”



World Scene

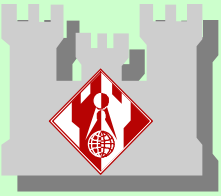
- Isolated regional conflicts
- Debts & loan defaults
- Trade blocs over military alliances
- Global warming
- Economic development at expense of environment

Domestic Scene

- Unprecedented natural disasters
- Stock market crash
- Environmental problems reach home
- Desire for economic & social stability
- Deteriorating infrastructure

US Government Scene

- Incapacitated government & public institutions
- States look towards federal government
- Centralized Public Works organization
- Infrastructure as a means to employment
- CONUS-based downsized military force structure



Topics

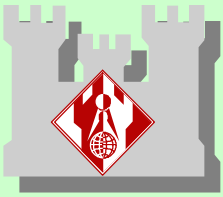
Strategic Planning Context

- ☒ What are we doing?
- ☒ Why are we doing it?

- ☒ Background
- ☒ Four Scenarios

Strategic Assessment

- ☐ Segment Map
- ☐ Industry Analysis
- ☐ Next Steps



Segmentation Process

Customer Needs

MILOPS Economic Development Security Public Health & Safety Environmental Stewardship Expertise

Customer Activities

Technology
Innovation
& Transfer

Plan
& Design

Construct

Operate &
Maintain

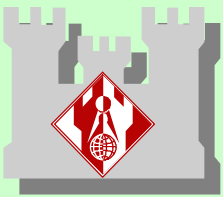
Acquire
& Dispose

Contract

Regulate

Variables Evaluated

- ✓ Price sensitivity
- ✓ Timeliness
- ✓ Innovation
- ✓ Growth potential
- ✓ Competitors
- ✓ Present USACE involvement



Segment Map

Customer Needs

MILOPS Economic Development Security Public Health & Safety Environmental Stewardship Expertise

Customer Activities

Technology
Innovation
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Plan
Design
Construct

Operate
Maintain

Acquire
Dispose
Contract

Regulate

A

B

C

D

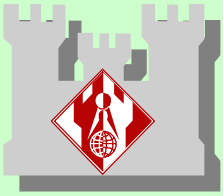
E

F

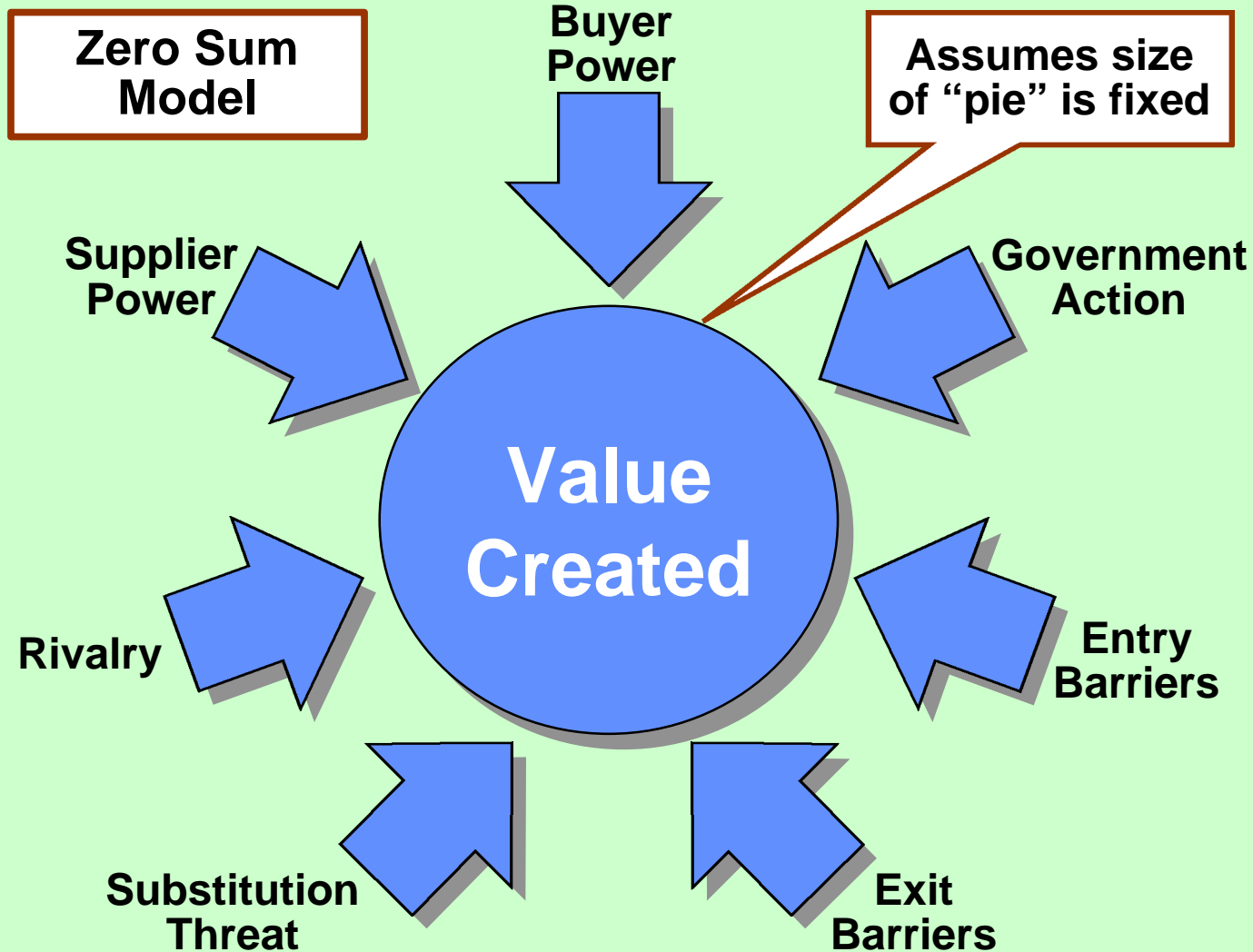
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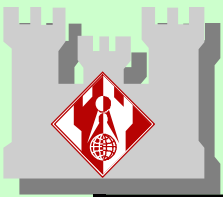
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I

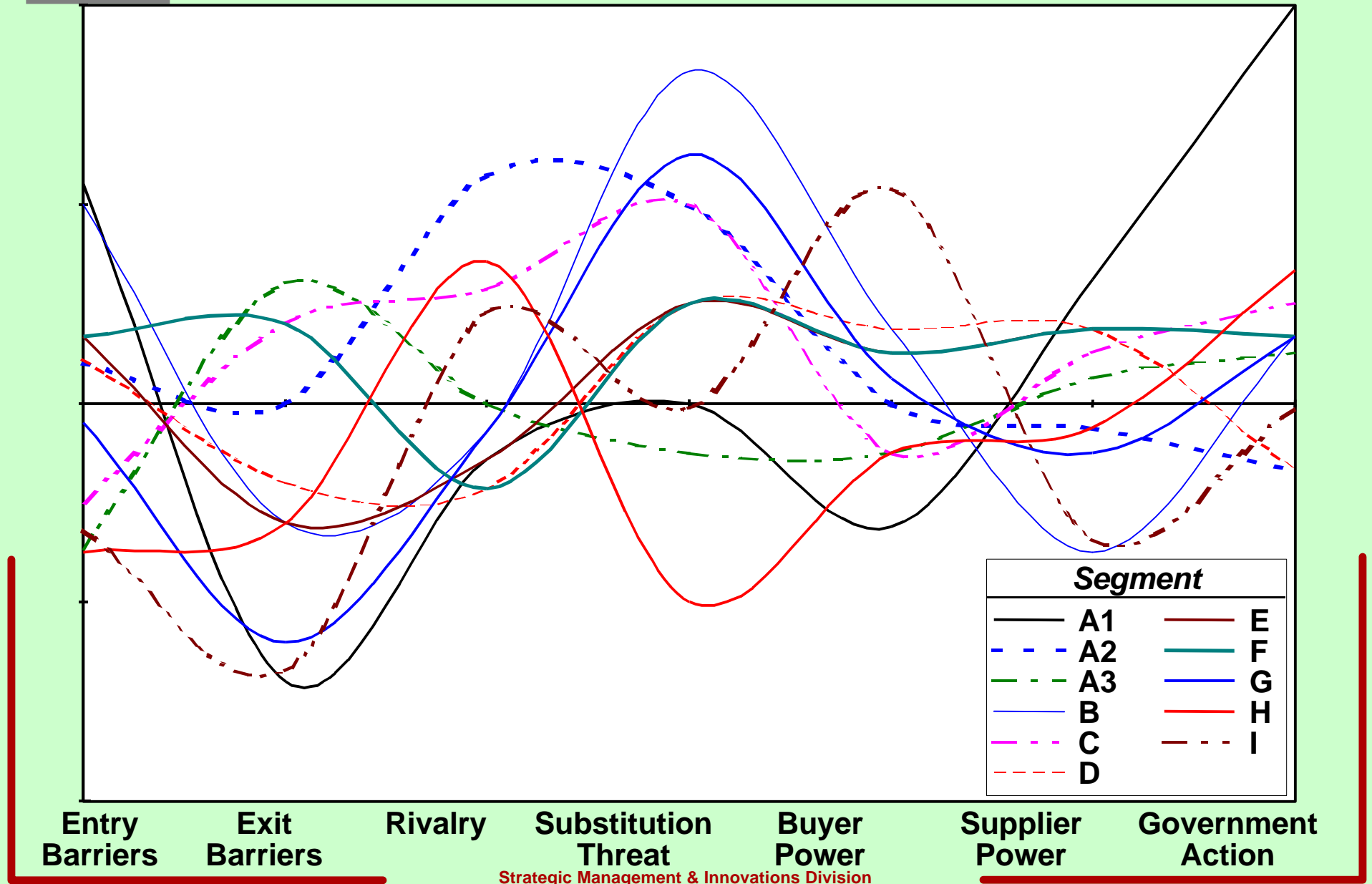


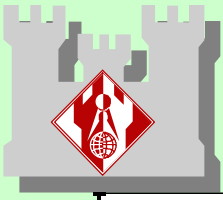
Industry Analysis -- Competition



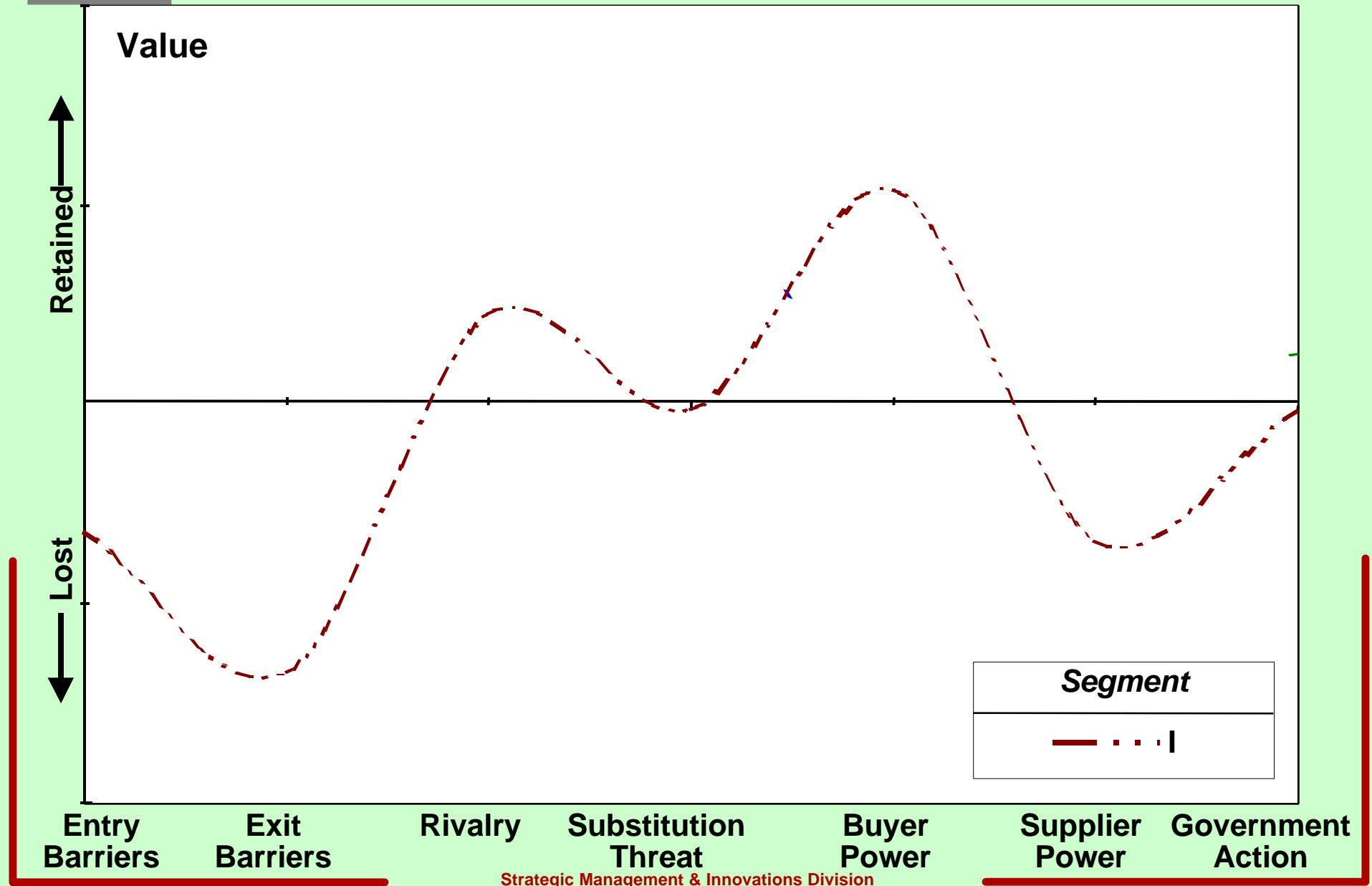


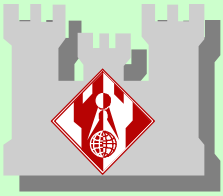
Competition Analysis of Segments





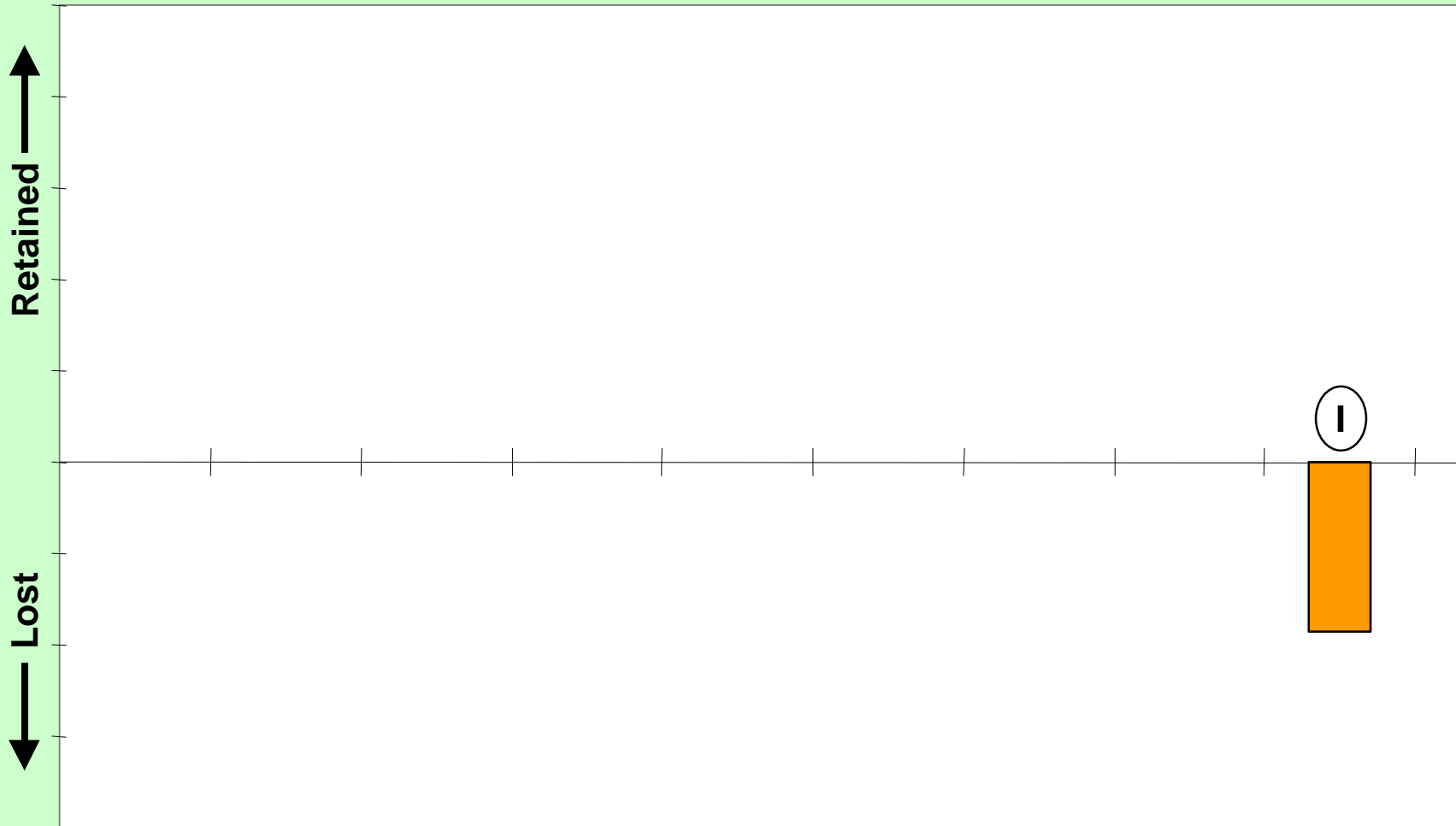
Competition Analysis of Segment I

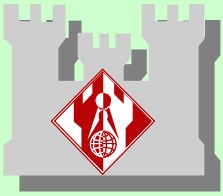




Competition Results for Segment I (Regulatory)

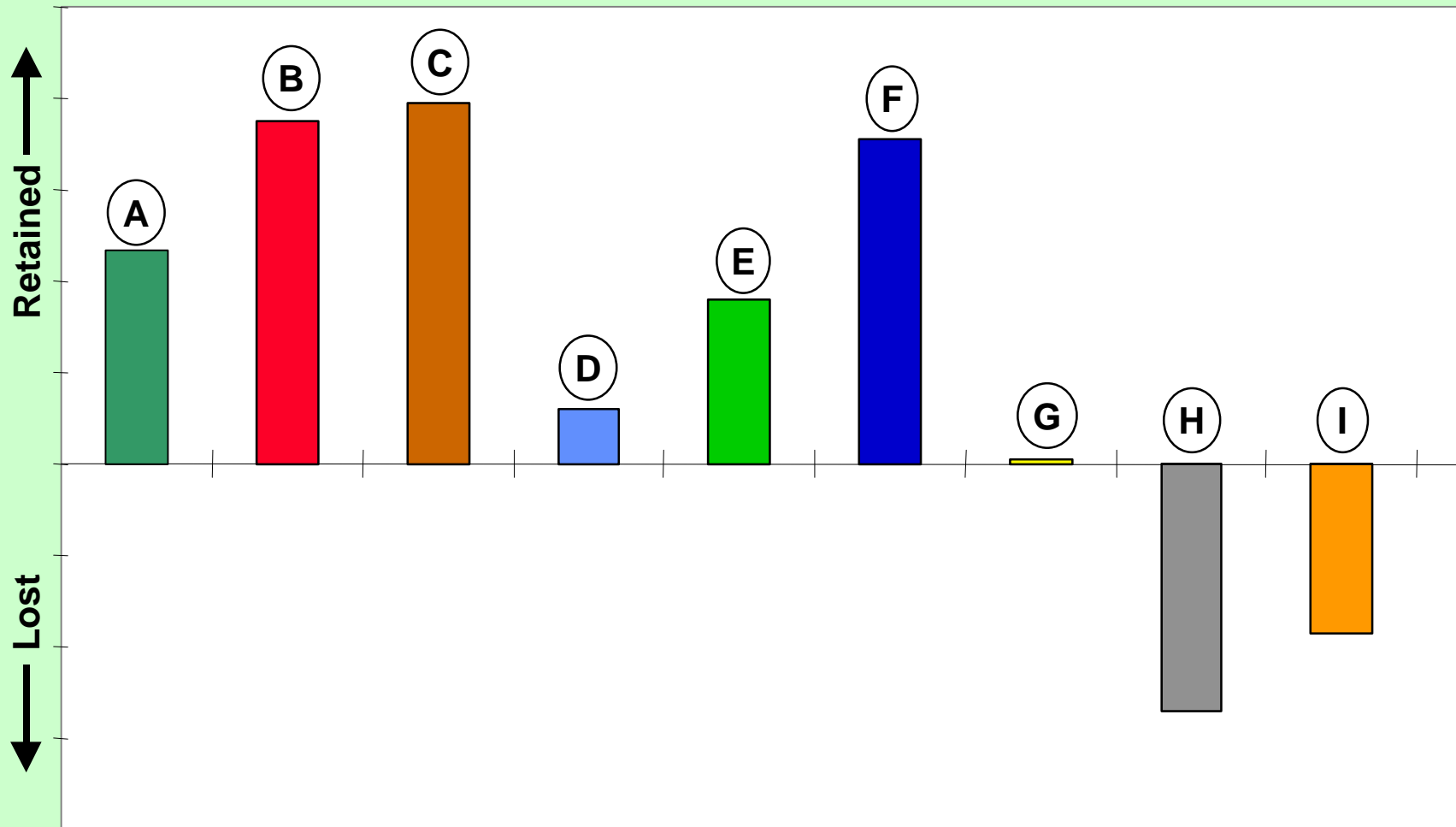
Value



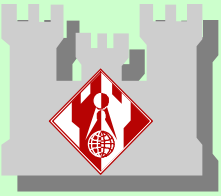


Competition Results for all Segments

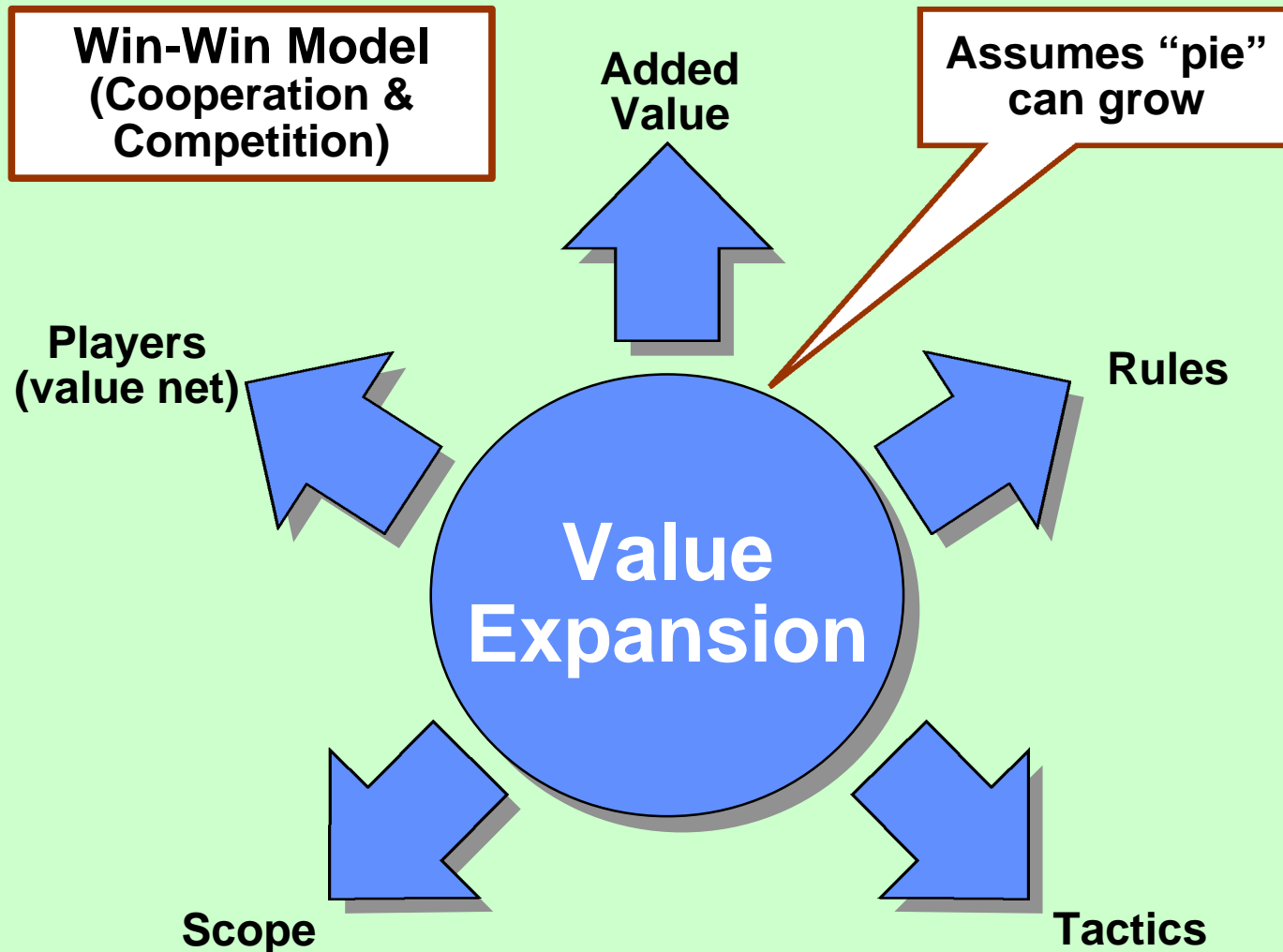
Value

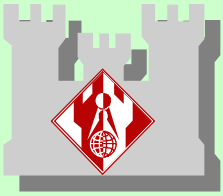


See Segment Map to identify bars



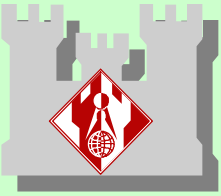
Industry Analysis -- “Coopetition”





“Coopetition” Added Value Framework

Players	Other player's benefit derived from USACE	USACE's benefit derived from other players
Suppliers		
Customers		
Rivals		
Complementors		



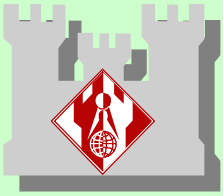
Core Competencies

Core Competencies are:

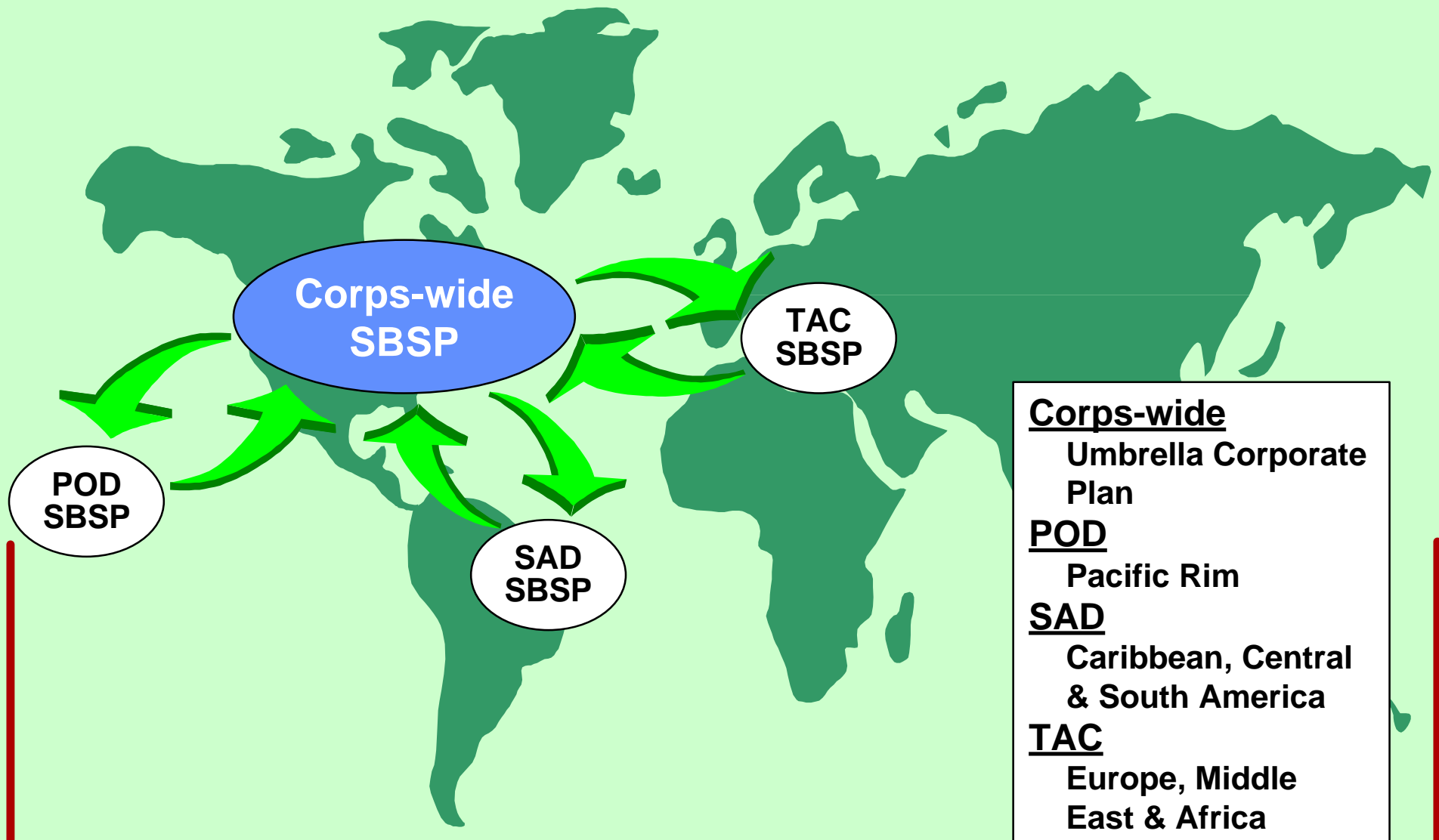
- ✓ Valued by customers & partners
- ✓ Provides advantage over competitors
- ✓ Sustainable over time
- ✓ Hard to imitate
- ✓ Applicable across multiple markets
- ✓ Spans multiple elements of organization

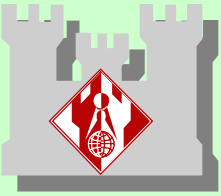
*Core Competencies are **NOT**:*

- ✓ Assets & end-products
- ✓ “Must have” capabilities
- ✓ General traits



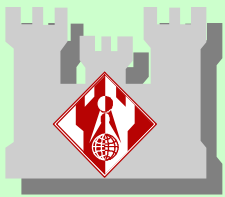
OCONUS Regional Analyses





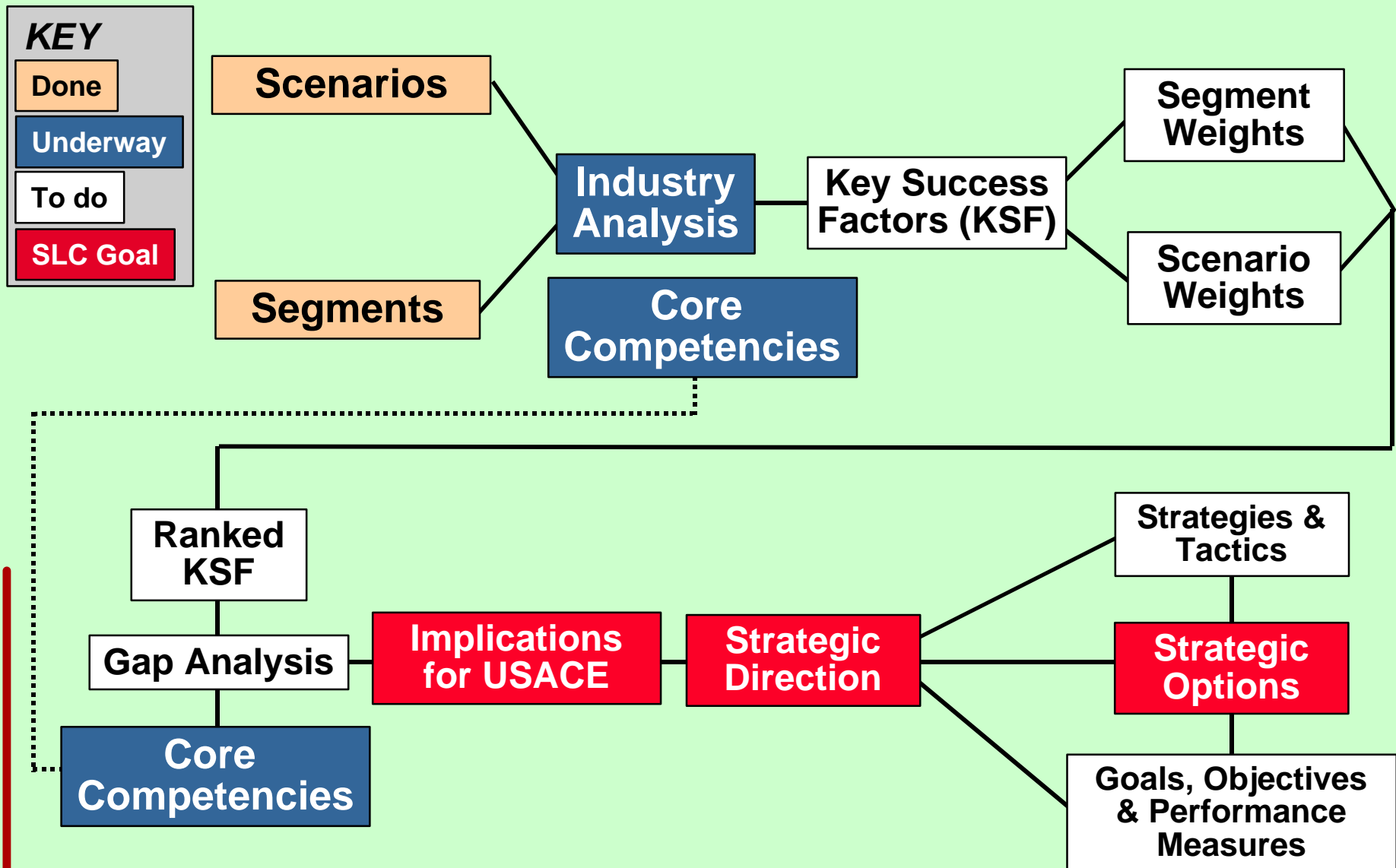
Regional Analysis Goals

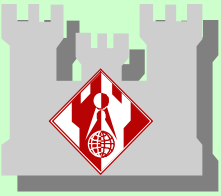
- ☐ Supplement Corps-wide scenarios with any key region specific trends & uncertainties
- ☐ Analyze Corps-wide segments from regional perspective
- ☐ Conduct industry analysis & identify region specific opportunities and threats
- ☐ Identify regional key success factors for integration with Corps-wide key success factors



Scenario Based Strategic Planning

~ The Road Map ~





Activities & Outputs

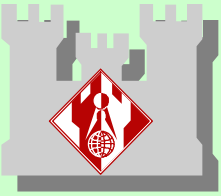
ACTIVITIES

OUTPUTS

Scenarios	→	What could the future look like?
Segments	→	Where are the future battlefields?
Industry analysis	→	What are the battlefield conditions?
Key success factors	→	What do we need to succeed?
Core competencies	→	What do we have now?
Gap analysis	→	What do we need that we don't have?
Implications for USACE	→	How should we change?

SLC '98

Strategic direction	→	Adjust strategic initiatives
Strategic options	→	Choices about what to pursue
Strategies & tactics	→	How to achieve chosen options
Goals/objectives measures		Scorecard keyed to strategy



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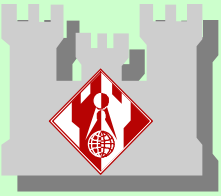
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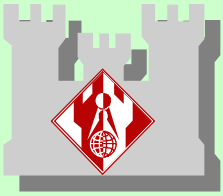
Discussion



Bottom Line

We are committed for the long-haul

- ☐ Senior Leadership Conference '98 is just the beginning
- ☐ Ongoing process to monitor scenario indicators and periodically reexamine strategies through planning cycle



US Army Corps Of Engineers

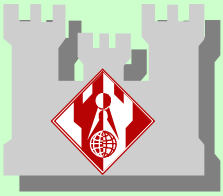
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Roles

Board of Directors

- Review & approval

Campaign Team

- Mentorship & executive guidance

Working Group

- Strategic thinking
- Knowledge transfer
- Research
- Critical thinking
- Brainstorming
- Data gathering
- Idea generation

Stakeholders

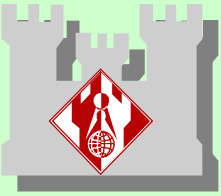
- Scenario validation
- Critical review
- Credibility check

CERM-S

- Research assistance
- Consensus building
- Analysis integration
- Contract management

Consulting

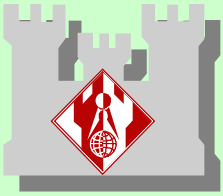
- Facilitation
- Process guidance
- Technical diagnostics
- Impartial advice



Key Trends

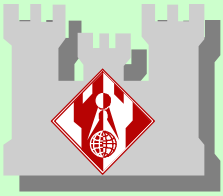
- T1 Population Shifts**
- T2 Increased Use of Electronic Based Technology**
- T3 Increased Importance of Environmental Issues**
- T4 Smaller military Force Structure**
- T5 Continuous Government Reinvention**
- T6 Increased Competition for Natural Resources**
- T7 Increased Competition for Human Resources**

(continued)



Key Trends (continued)

- T8 Decaying Infrastructure**
- T9 Increasing Interoperability & Jointness Within DOD**
- T10 Increased use of Scientific & Engineering Technology (simulation, models, AI, VR, & non-electronic based)**
- T11 Advances in Military Engineering & Warfare Technology**
- T12 Continued Pressure to Balance the Budget**



Key Uncertainties (Upper & Lower Bounds)

U1 What is the Geo-political, Socio-economic, cultural climate in 2020?

- Wide spread peace & prosperity with sporadic minor conflicts
- Wide spread conflicts, strife & unrest

U2 To what extent will climatological/ environmental conditions be addressed by 2020?

- Problems understood & manageable
- No agreement on issues or solutions

U3 What will the frequency, intensity, type of events/incidents/disasters be by 2020?

- Low & contained
- High & unmanageable

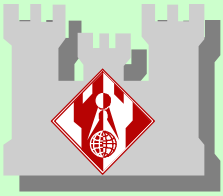
U4 What will the Federalist relationships be by 2020?

- Centralized (Federal)
- Decentralized (State & Local)

U5 What will the alignment of military engineering authorities/ missions/functions be by 2020?

- Centralized (Purple)
- Decentralized (green)

(continued)



Key Uncertainties (Upper & Lower Bounds)

(continued)

U6 What will the alignment of public works engineering authorities/missions/functions be by 2020?

- Mandated (Federal Engineer)
- Free market (customer's choice)

U7 Will the education system provide needed KSAs?

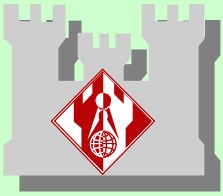
- Yes (mostly)
- No (sort of)

U8 To what extent will the workplace become irrelevant in the Global Village?

- Majority of people work away from the office
- Majority of people work in traditional office

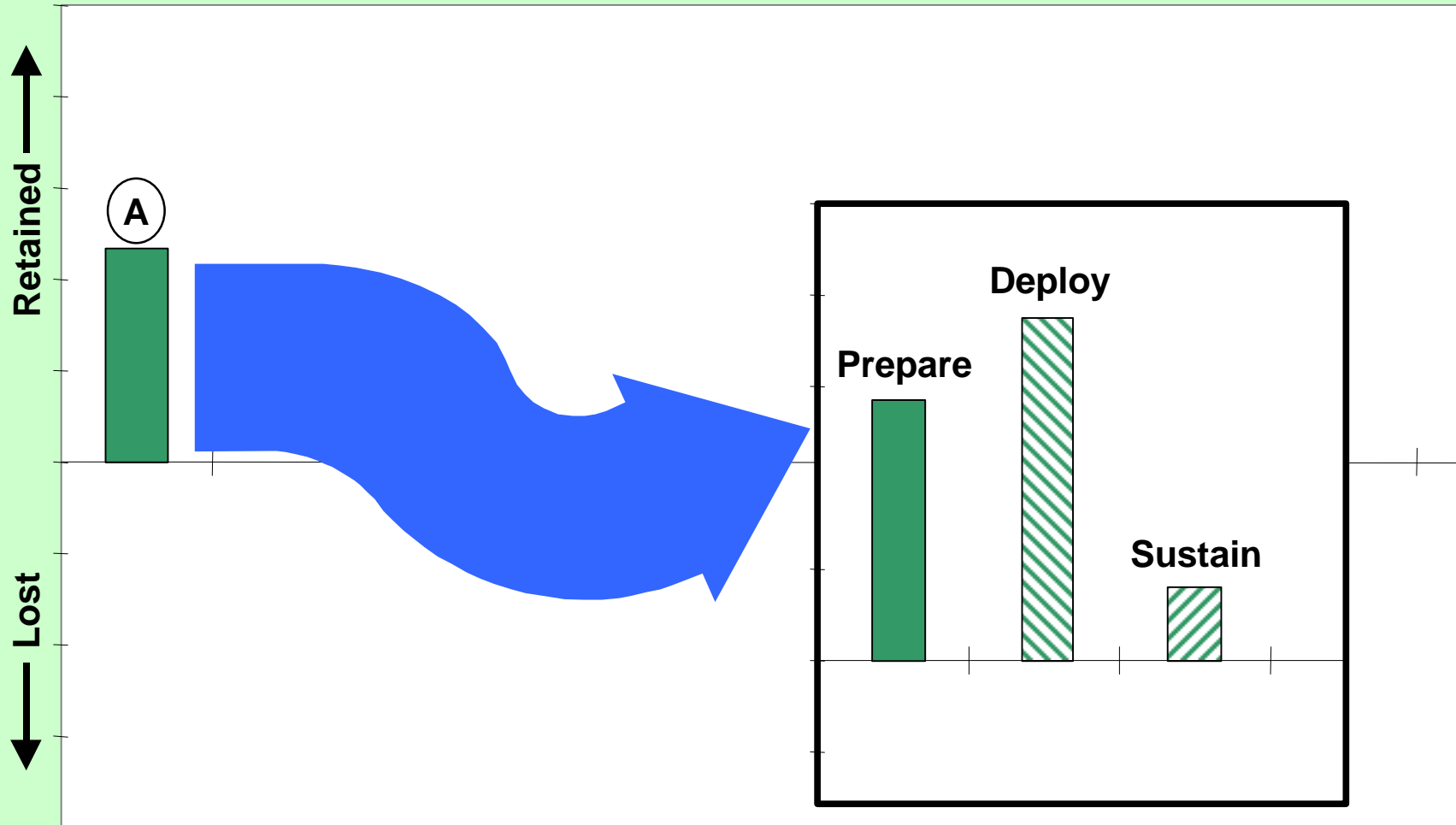
U9 To what extent will global conditions affect US defense basing strategy?

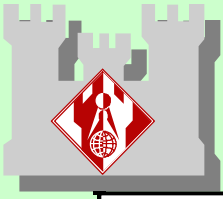
- Forward Deployed forces
- CONUS based Power Projection forces



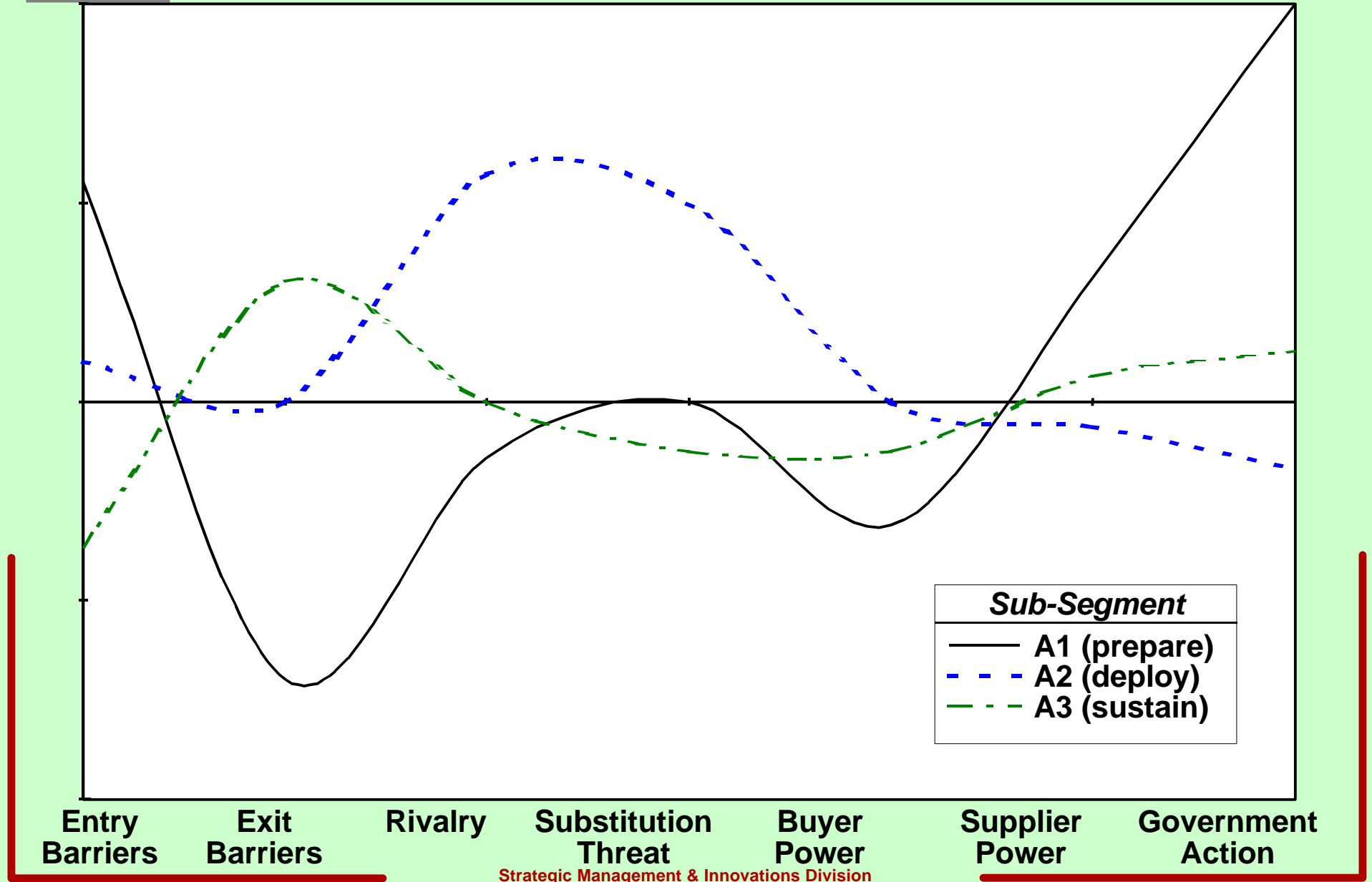
Military Operations Sub-Segments

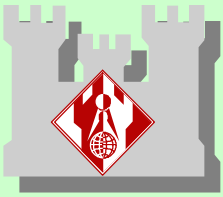
Value





Military Operations Sub-Segments

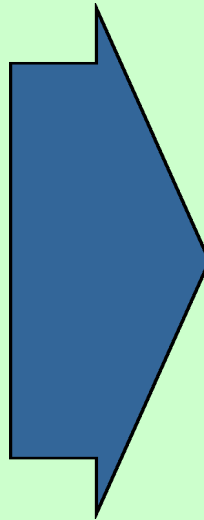




Opportunities & Threats

Opportunities

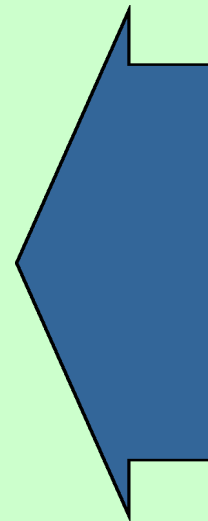
	Each Scenario
Each Segment	



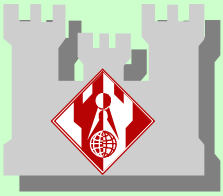
- Identify needs generated in potential future scenarios

Threats

	Each Scenario
Each Segment	



- Identify challenges posed by potential future scenarios



SEGMENT A

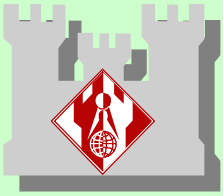
Military Operations

Definition

Functions, activities, and missions in support of U.S. National Military Strategy.

Categorized in three areas:

- ☐ ***Prepare*** the force (man, equip, train)
- ☐ ***Deploy*** the force (mobilize, transport)
- ☐ ***Sustain*** the force (engineering, logistics, & infrastructure)

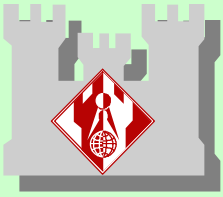


SEGMENT B

TECHNOLOGY INNOVATION & TRANSFER

Definition

The application of specialized skills, techniques, and tools used to develop and implement specific engineering related activities in areas of economic development, security, public health and safety, and environmental stewardship. This normally equates to the application of the research and development phase of the industry. When applied to a specific engineering undertaking, the skills, techniques, or tools are used to complement other phases of project or program implementation.

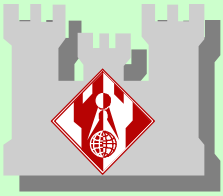


SEGMENT C

Expertise

Definition

Professionally recognized technical knowledge and experience in technology development & transfer, planning & design, and construction. Expertise can be held by individuals and organizations, is recognized by formal academic training, experience and professional accreditation.



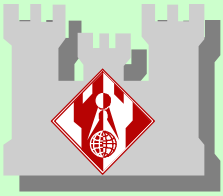
SEGMENT D

Economic Development

Definition

The life cycle of activities to plan, design, construct, or implement a program or project, which improves the economic health of citizens, communities, and the nation.

This segment includes activities associated with acquiring assets and contracting for services necessary to implement a program or project.

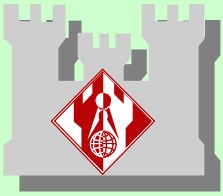


SEGMENT E

Security, Public Health & Safety

Definition

Plan, design and construct activities that provide infrastructure for the nation's civil and military responses to economic, environmental, and military threats to society; reduce the risk of disease or injury; and increase the productive lives of individuals and society at-large.

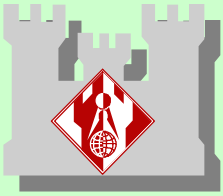


SEGMENT F

Environmental Restoration

Definition

Environmental cleanup, and habitat and ecosystem restoration. To reduce to acceptable levels threats to human health and the environment posed by hazardous, toxic and radioactive waste that has been released to the environment.

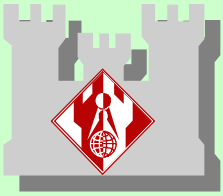


SEGMENT H

Acquire, Manage & Dispose of Assets

Definition

Those activities associated with obtaining all necessary assets required to implement a project or program. These activities include the procurement, management and disposal of needed real property assets, logistics, human resources, training and other professional services.



SEGMENT I

Regulation

Definition

This activity involves successfully implementing and executing the Corps regulatory responsibilities under the River and Harbor Act, Clean Water Act and the Marine Protection, Research and Sanctuaries Act, as well as maintaining compliance with its regulatory obligations under other environmental laws.